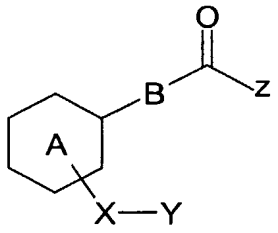
CLAIMS

1. A compound of formula I, or a pharmaceutically acceptable salt thereof,



I

wherein

Z is OR^1 or NR^1R^2 wherein each of R^1 and R^2 is independently H, or a hydrocarbyl group;

X is an alkylene, alkenylene, or alkynylene group, each of which may be optionally substituted by one or more substituents selected from alkyl, COOH, CO_2-alkyl, alkenyl, CN, NH_2, hydroxy, halo, alkoxy, CF_3 and nitro;

Y is a polar functional group selected from OH, NO_2, CN, COR^3, $COOR^3$, NR^3R^4, $CONR^3R^4$, SO_3H, SO_2-R^3, $SO_2NR^3R^4$ and CF_3, where each of R^3 and R^4 is independently H or a hydrocarbyl group;

A is an aryl or heteroaryl group, each of which may be optionally substituted; and

B is $(CH_2)_n$ where n is 0, 1, 2, 3, 4 or 5;

with the proviso that:

(i) when A is phenyl, n is 0, and Z is OH, X-Y is other than *meta*-C≡C-$(CH_2)_2CO_2H$, *meta*-C≡C-$(CH_2)_2OH$, *meta*-C≡C-$(CH_2)_2CO_2Me$, *meta*-$(CH_2)_4CO_2H$, *ortho*-CH_2CO_2H, *ortho*-$(CH_2)_2CO_2H$ and *ortho*-$(CH_2)_4CO_2H$; and

(ii) when A is phenyl, n is 0, and Z is OMe, X-Y is other than *meta*-C≡C-$(CH_2)_4OH$.

2. A compound according to claim 1 wherein Y is selected from CN, OH, $COOR^3$, $SO_2NR^3R^4$, $CONR^3R^4$, where each of R^3 and R^4 is independently H or a hydrocarbyl group.

3. A compound according to any preceding claim wherein each of R^1, R^2, R^3 and R^4 is independently H, an alkyl group, an aryl group, or a cycloalkyl group, each of which may be optionally substituted.

4. A compound according to any preceding claim wherein Y is selected from OH, CN, $COOR^3$, $CONR^3R^4$, where each of R^3 and R^4 is independently H or an optionally substituted alkyl group.

5. A compound according to any preceding claim wherein Y is selected from OH, CN, COOMe, COOH, $CONH_2$, CONHMe and $CONMe_2$.

6. A compound according to any preceding claim wherein n is 0.

7. A compound according to any preceding claim wherein X-Y is selected from
$-C\equiv C-(CH_2)_p-Y$;
$-C(R^5)=C(R^6)-(CH_2)_q-Y$; and
$-C(R^5)(R^6)C(R^7)(R^8)-(CH_2)_r-Y$;
where each of R^5, R^6, R^7 and R^8 is independently H or alkyl, and each of p, q and r is independently 2, 3, or 4.

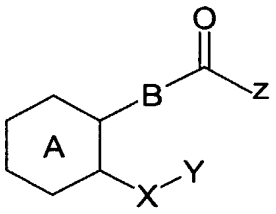
8. A compound according to any preceding claim wherein X-Y is selected from
$-C\equiv C-(CH_2)_p-Y$; and
$-CH=CH-(CH_2)_q-Y$;
where each of p and q is independently 2, 3, or 4.

9. A compound according to claim 7 wherein X-Y is
cis $-C(R^5)=C(R^6)-(CH_2)_q-Y$ and q ie 2, 3 or 4.

10. A compound according to any one of claims 1 to 7 or claim 9 wherein X-Y is
$-C(Me)_2-CH_2-(CH_2)_r-Y$ and r is 2, 3 or 4.

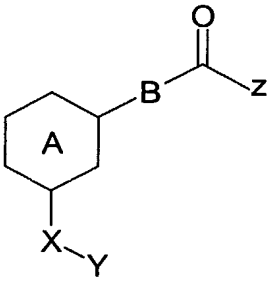
11. A compound according to any preceding claim wherein A is phenyl or pyridyl.

12. A compound according to any preceding claim of formula Ia



Ia

13. A compound according to any one of claims 1 to 11 of formula Ib



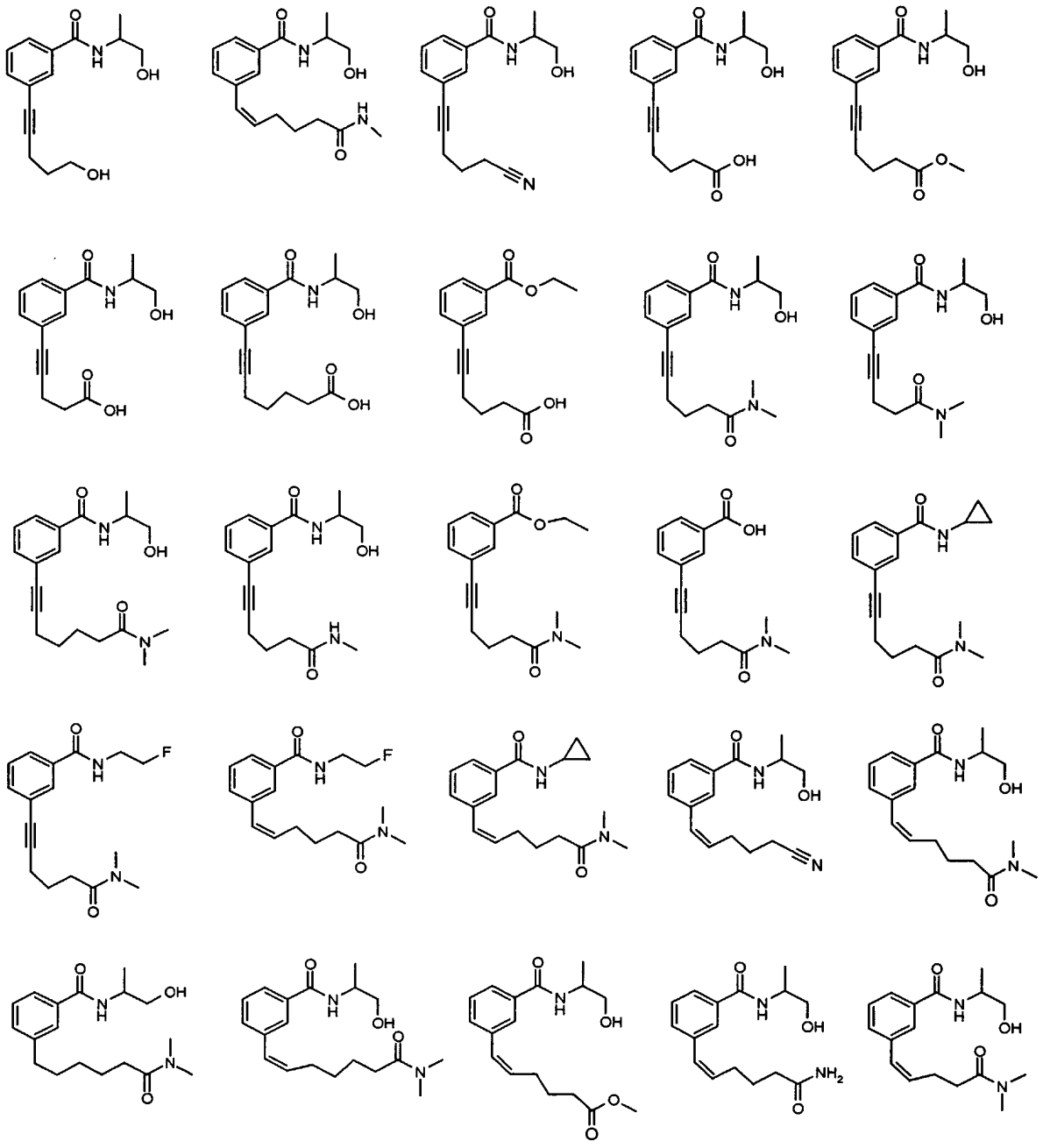
Ib

14. A compound according to claim 12 or claim 13 wherein A is phenyl.

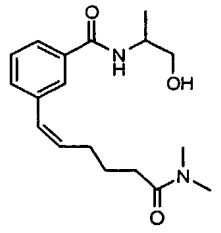
15. A compound according to any preceding claim wherein Z is OR^1 or NR^1R^2 and each of R^1 and R^2 is independently H, an alkyl or a cycloalkyl group, each of which may be optionally substituted by one or more OH or halogen groups.

16. A compound according to any preceding claim wherein Z is selected from OH, OEt, $NHCH_2CH_2F$, NH-cyclopropyl, $NHCH(Me)CH_2OH$ and $NHCH_2CH_2OH$.

17. A compound according to any preceding claim which is selected from the following:

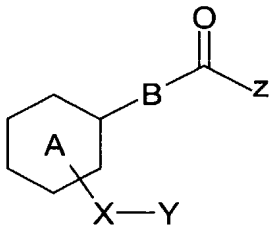


18. The compound of claim 17 which is



19. The compound of claim 18 which is in the form of a racemic mixture.

20. Use of a compound of formula Ia, or a pharmaceutically acceptable salt thereof,



Ia

wherein

Z is OR^1 or NR^1R^2 wherein each of R^1 and R^2 is independently H, or a hydrocarbyl group;

X is an alkylene, alkenylene, or alkynylene group, each of which may be optionally substituted;

Y is a polar functional group;

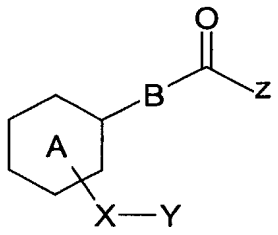
A is an aryl or heteroaryl group, each of which may be optionally substituted; and

B is $(CH_2)_n$ where n is 0, 1, 2, 3, 4 or 5;

in the preparation of a medicament for treating a muscular disorder.

21. Use according to claim 20 wherein the muscular disorder is a neuromuscular disorder.

22. Use of a compound of formula Ia, or a pharmaceutically acceptable salt thereof,



Ia

wherein

Z is OR^1 or NR^1R^2 wherein each of R^1 and R^2 is independently H, or a hydrocarbyl group;

X is an alkylene, alkenylene, or alkynylene group, each of which may be optionally substituted;

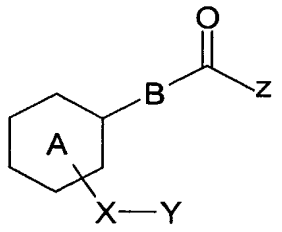
Y is a polar functional group;

A is an aryl or heteroaryl group, each of which may be optionally substituted; and

B is $(CH_2)_n$ where n is 0, 1, 2, 3, 4 or 5;

in the preparation of a medicament for controlling spasticity and tremors.

23. Use of a compound of formula Ia, or a pharmaceutically acceptable salt thereof,



Ia

wherein

Z is OR^1 or NR^1R^2 wherein each of R^1 and R^2 is independently H, or a hydrocarbyl group;

X is an alkylene, alkenylene, or alkynylene group, each of which may be optionally substituted;

Y is a polar functional group;

A is an aryl or heteroaryl group, each of which may be optionally substituted; and

B is $(CH_2)_n$ where n is 0, 1, 2, 3, 4 or 5;

in the preparation of a medicament for treating a gastrointestinal disorder.

24. Use according to claim 23 wherein the gastrointestinal disorder is a gastric ulcer.

25. Use according to claim 23 wherein the gastrointestinal disorder is Crohn's disease.

26. Use according to claim 23 wherein the gastrointestinal disorder is secretory diarroehea.

27. Use according to claim 23 wherein the gastrointestinal disorder is paralytic ileus.

28. Use according to any one of claims 20 to 27 wherein said modulator selectively modulates peripheral cannabinoid receptors.

29. Use according to any one of claims 20 to 28 wherein said compound selectively modulates peripheral cannabinoid receptors over central cannabinoid receptors.

30. Use according to any one of claims 20 to 29 wherein the compound binds substantially exclusively to peripheral cannabinoid receptors.

31. Use according to any one of claims 20 to 30 wherein the compound is a cannabinoid receptor agonist.

32. Use according to any one of claims 20 to 31 wherein the compound does not substantially agonise central cannabinoid receptors.

33. Use according to any one of claims 20 to 32 wherein the compound is substantially excluded from the CNS.

34. Use according to any one of claims 20 to 33 wherein Y is selected from NO_2, CN, OR^3, COR^3, $COOR^3$, NR^3R^4, $CONR^3R^4$, SO_3H, SO_2-R^3, $SO_2NR^3R^4$ and CF_3, where each of R^3 and R^4 is independently H or a hydrocarbyl group.

35. Use compound according to any one of claims 20 to 34 wherein Y is selected from CN, $COOR^3$, $SO_2NR^3R^4$, $CONR^3R^4$, where each of R^3 and R^4 is independently H or a hydrocarbyl group.

36. Use according to any one of claims 20 to 35 wherein the compound is as defined in any one of claims 1 to 19.

37. A method of treating a disorder associated with the modulation of peripheral cannabinoid receptors, said method comprising administering to a subject in need thereof, a therapeutically effective amount of a compound according to any one of claims 1 to 19.

38. A method according to claim 37 wherein said disorder is associated with peripheral cannabinoid receptor deactivation.

39. A method according to claim 37 or claim 38 wherein the compound does not substantially agonise central cannabinoid receptors.

40. A method according to any one of claims 37 to 39 wherein the compound binds substantially exclusively to peripheral cannabinoid receptors.

41. A method according to any one of claims 37 to 40 wherein the compound is substantially excluded from the CNS.

42. A pharmaceutical composition comprising a compound according to any one of claims 1 to 19, or a pharmaceutically acceptable salt thereof, admixed with a pharmaceutically acceptable diluent, excipient or carrier.

43. Use of a compound of formula Ia, or pharmaceutically acceptable salt thereof, as defined in claim 20 in an assay for identifying further compounds capable of modulating cannabinoid receptor activity.

44. Use according to claim 43 wherein the assay is a competitive binding assay.